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ABSTRACT

Two questions arise in examining the implications of physical education: Is physical education an education of the physical? and Is physical education an education through the physical? In these two questions there are two distinct points of view, two different ways of understanding the meaning, scope, and aim of education, two conceptions of man, and two implicit epistemological theories. Addressing these questions, this paper presents an analysis of the philosopy of Descartes, who voiced the clearest articulation of the dualistic conception of man. One of the central doctrines of Cartesian Dualism is that there is a real distinction between mind and body, though they are intimately connected. Descartes' epistemological position is that there is no conceptual connection between any "thought" or mental occurrence and any physical occurrence. An analysis of his position shows that there cannot be such a thing as physical education, whether it is interpreted as education of the physical, or as education through the physical. The analysis also shows that under the Cartesian thesis, the common notion of education as a process, and as an institution that is generally understood to involve teachers and students, cannot be. Under an integrated, unified model of man, physical education is not education of the physical nor is it education (of the mind) through the physical, but it is the education of the person. (JD)

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Cartesian Dualism and Physical Education: Epistemological Incompatibility

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Cartesian Dualism and Physical Education: Epistemological Incompatibility

I

Late in the nineteenth and early in the twentieth centuries major changes in thinking pervaded the American social scene, encompassing philosophy, politics, and education, amongst many others. Under the influence and urging of such seminal thinkers as G. Stanley Hall, Edward Thorndike, John Dewey, and William Heard Kilpatrick, the progressive movement emerged, advanced, and flourished, extending its ideas into many aspects of life. Their teachings and ideals also had an impact on the leaders in physical education, men such as Thomas Wood, Clark Hetherington, and Luther Halsey Gulick, who are generally credited with formulating the conceptual framework upon which "the new physical education" would be elaborated (Weston, p. 51). These leaders shifted the focus of physical education away from the European (Swedish and German) formal schools of gymnastics with its medical and biological orientation, by moving it squarely into the domain of education. Physical education's new educational orientation was championed in the 1920-40 era by such authors as Jay B. Nash and J. F. Williams, who not only carried the banner of "the new physical education" but vigorously attacked the previous conception of physical education (which may be more accurately described as physical culture or as physical training) with its narrow concern for bodily development and physical health.

J. F. Williams, the man credited with coining the term, physical education as education through the physical, fired the first salvo in what has become known in the physical education literature as "The Great Debate", by juxtaposing the two rival notions: "No one can examine earnestly the implications of physical education without facing two questions. These are: Is physical education an education of the physical? Is physical education an enducation through the physical?" (Williams, 1930B, p. 279). While there would be some concommitant learning taking place in the education of the physical and, as well, an education through the physical would produce some distinct physical gains, it is important to realize that in these two questions there are two distinct points of view, two radically different ways of looking at physical education, two different ways of understanding the meaning, scope, and aim of education, two conceptions of man, and two implicit epistemological theories.

Supporters of the education-of-the-physical school of thought identify strong muscles and firm ligaments as the main outcome, a position staunchly defended by Mc Cloy ("How About Some Muscle?", 1936) in his rebuttal to the original attack launched by Williams (1930, A; 1930, B). Williams rejected the education-of-the-physical notion, which implies that the body can be educated as a thing apart from mind, on a number of grounds: (1) its focus on the cult of muscles and motor or skill learning was too narrow and limited; (2) its general orientation was incompatible with the progressivist ideal of education for complete living; and (3) he accused them of holding a dualistic conception of man where

mind and body can be regarded as distinct and separate entities. Defending his own position by contrasting it with the notion implicit in the education-of-the-physical view, Williams (1930, B, p. 279) asserts that "modern physical education with its emphasis upon education through the physical is based upon the biologic unity of mind and body." Its goals extend to total education accomplished through the medium of physical activity. Basic to this concept is the belief that education of the mind may, indeed does, occur through the education of the body.

No explanation is given by Williams for his notion of "the biologic unity of mind and body" save for a passing reference to the then emerging philosophy of behaviorism. Beyond pointing out that a dualistic conception of man allows for the notion of a cult of muscles where the body can be "educated" as a thing apart from the mind and asserting the unity of mind and body in his own conception of physical education, there is no further consideration of the mind-body problem in relation to physical education in his writings. Neither is any such discussion found in the views expressed by Mc Cloy in his defence of his position. Indeed, the entire corpus of literature devoted to the philosophy of physical education is marked by a paucity of attention to this important topic; it is a subject which has not attracted the attention of the scholars in the field either from a metaphysical or an epistemological perspective. This I regard as a major omission since the very notion of physical education--be it as education of or as education through the physical--involves persons and unless we clearly understand what a person is we

cannot be very effective as educators. In part to remedy this oversight, and in part to augment and develop what Williams barely started, there is a need to examine and analyze what most philosophers regard as the clearest articulation of the dualistic conception of man, the thesis posited by Descartes, the father of modern philosophy. An analysis of his position will show that there cannot be such a thing as physical education whether it is interpreted as education of the physical or as education through the physical. Furthermore, the analysis will also show that under the Cartesian thesis the common notion of education as a process and as an institution that is generally understood to involve teachers and students, cannot be.

II

Descartes insisted that epistemology is the proper starting point of all philosophy. His basic philosophical question is "What do I know?" and he hopes to be able to answer that query by reflection on the beliefs he finds himself disposed to hold. Posing the question in this manner shifts the problem from a general approach to knowledge to an emphasis on the individual thinking man. Before attempting to answer questions about what men may know Descartes sees the primary task as attempting to determine what a man may know. Changing the focus from the general to the individual carries with it a shift in the locus of the problem of knowledge from the external, communal world to the "internal" world of the mind. All replies now become individualistic. In addition, such a shift in locus involves certain consequences that have been extremely

detrimental to physical education in its quest to be recognized as an integral part of education. This will become clearer from the discussion in the succeeding sections. For now it will suffice to note that where knowledge is restricted to the individual's internal thought processes, human physical action, which is executed by the "body", cannot be regarded as a manifestation of knowledge. For Descartes knowledge must be indubitable but indubitability cannot be achieved through sense perception thus bodily activity cannot yield knowledge nor can human physical action be regarded as an expression of knowledge. Under this thesis physical education is confronted with insurmountable obstacles in regard to its proper place in the educational spectrum.

In common with many other philosophers who confront the problem of knowledge, Descartes deals with the issue of skepticism. However, unlike other philosophers who devote their efforts to the refutation of skepticism while elaborating their own epistemology, Descartes adopts what might best be described as a methodological skepticism. His procedure is quite simple and direct--he will reject as being absolutely false everything, all beliefs which he should have the slightest cause to doubt, and then see if he can eventually find anything which is entirely indubitable (Discourse, p. 53; Meditations, p. 23). The tone and underlying optimism indicate confidence in finding some truth which is indubitable and certain to serve as the base upon which to build the edifice of knowledge. Such a system of knowledge--the ideal of knowledge--is a systematic, orderly, and ordered body of propositions dependent one on the other.

Although Descartes is not a skeptic his initial epistemological position does not include taking any instance of human knowledge for granted. His efforts are devoted to proving that there are examples of human knowledge and for Descartes knowledge is restricted to what is certain and indubitable. The way of achieving this goal, his method, is for Descartes to prove to himself that he knows something with a certainty that is able to withstand any conceivable criticism. Success in this endeavor demands careful consideration of the manner in which the proof is obtained and presented should anyone doubt the validity of the claim. Influenced by his training in mathematics, particularly geometry, Descartes believed that if he could find a set of certain statements that could serve as axioms for a deductive system, both consistent and complete, and the theorems which could be developed from them would build an irrefutable and uncontestable system of knowledge. The notion of a deductive system is very important for it eliminates the possibility of error creeping in; rational, logical thinking is the only certain way to proceed.

Our senses often deceive us and so they cannot be trusted as a source of knowledge nor as an avenue through which knowledge is discovered. Descartes' argument against empirical knowledge rests on two grounds. First, it is well known that we sometimes see things which do not exist and, conversely, we sometimes overlook things which are right in front of us. Equally well known is the fact that our senses deceive us at times; a straight stick will appear bent when part of it is submerged in

water. Secondly, we are unable to tell always with absolute certainty whether we are awake or dreaming. There is always room for doubt and where there is doubt there is also the possibility of confusion. Impressions from dreams are mixed with reality. If dreams and states of waking are at times confused, how can it ever be known by someone with certainty that he is awake, or dreaming, at any given moment? Since there is no way to tell the net result is that no sense experience can serve as the source of knowledge. We can always be wrong about sense experience which means that our senses cannot provide the conclusive, irrefutable evidence which is needed for knowledge.

Everything based on sense perception can be doubted, even the existence of one's own body. Descartes if therefore compelled to turn away from sense perception in his search for certainty but at the very same time he must still deal with the problem of his existence, both bodily and non-bodily. Denial of the existence of his body is not necessarily the denial of his own existence. The body and the senses are not needed to confirm his own existence; that is confirmed whenever he thinks about the problem for every time Descartes ponders his existence he knows for certain that he exists. "I think, therefore I am" is a necessary truth every time the statement is uttered. Where the existence of material things is acknowledged, the existence of a thinking substance, mind, presents no problem. Even if Descartes is deceived into believing that all material things exist he still must exist for there must be some existent being which is deceived:

> there can be no slightest doubt that I exist, since he deceives me; and let him deceive me as much as he will, he can never make me be nothing as long as I think that I am something. Thus, after having thought well on this matter and after examining all things with care, I must finally conclude and maintain that this proposition: I am, I exist, is necessarily true every time that I pronounce it or conceive it in my mind.
>
> (Meditations, p. 23)

Under any and all circumstances, as long as Descartes thinks then he exists.

For Descartes the act of doubting is part of the act of thinking and so every time he doubts it is further confirmation of his existence. It is also, in a paradoxical way, further proof for the certain and indubitable status of his knowledge claim, "I think, therefore I am" which is the end product of his method of doubt. Certain knowledge of one's existence is the first principle, or axiom, but what Descartes then needs to decide is what precisely the "I" is that exists. "But I do not yet know sufficiently clearly what I am, I who am sure that I exist" (Meditations, p. 24). In pondering this question Descartes cannot deviate from his established principle of accepting only that which is entirely certain and indubitable and the only certain and indubitable thing he knows is that he is "a thing which thinks. And what more?...I am not this assemblage which is called a human body" (Meditations, p. 26).

The "I" that exists is not a bodily person but a thinking person who knows through pure "intellection" and not through sensation. To leave no doubt about what the "I" is, Descartes (Meditations, p. 42) adds, "I understand perfectly that I am a being that thinks and that is not extended."

Mind is defined by Descartes as an unextended substance, an immaterial, thinking thing which does not exist in space but does exist in time. In contrast, body is defined as a bounded figure which can be located in some place and occupying space in such a way that every other body is excluded from it; it can be perceived by the five senses. Body is a material, non-thinking, extended substance. Two additional differences distinguish mind from body: (1) mind is known with certainty for it is a necessary truth that it exists every time I think but body, which is known through sense perception, is open to doubt, and therefore knowledge of the body cannot be a necessary truth; (2) body is divisible while mind is indivisible. Descartes is very clear about mind and body as separate and distinct entities, "And certainly my idea of the human mind, in so far as it is a thinking being, not extended in length, breadth, and depth, and participating in none of the qualities of body, is incomparably more distinct than my idea of anything corporeal" (Meditations, p. 51). Conversely it can be stated that the body, as an extended substance, cannot participate in any of the qualities of the mind since the major quality of mind is intellection. It should be noted that the last phrase in the quotation just cited further underscores Descartes' view that the only thing which cannot be doubted is the existence of his own mind.

Minds are characterized by predicates that do not apply to bodies while bodies are characterized by predicates that do not apply to minds. The distinction is radical; minds and bodies are ontologically different types which are mutually exclusive, so much so that Ryle (p. 11) describes a Cartesian person as living through two collateral histories, one consisting of what happens in and to his body, the other consisting of what happens in and to his mind. Events of the body are public since it is an extended, material substance but events of the mind are private since it is an unextended, immaterial substance. A Cartesian person can be regarded as a composite of two essentially distinct substances, and when we refer in any way to such a person we are actually referring to one, and sometimes to both, of the separate substances. Strictly speaking, under the Cartesian thesis whenever I use the personal pronouns "I" or "you" to refer to a person, only one substance, mind, is indicated. But a strict interpretation is only possible on a very abstract level for in reality we cannot identify another mind, we can only identify another body. This "unique" situation yields two uses of the term, "person"; one sees the person as mind only and the other, the more commonly accepted, sees the person as a combination of mind and body.

According to Descartes two things, mind and body, can be made to exist separately by God.

> From this very fact that I know with certainty that I exist, and I find that absolutely nothing else belongs (necessarily) to my nature or essence except that I am a thinking being, I readily conclude that my essence consists solely in being a body which thinks (or a substance whose whole essence or nature is only to think). And although perhaps, or rather certainly, as I will soon show, I have a body with which I am very closely united, nevertheless, since on the one hand I have a clear and distinct idea of myself in so far as I am only a thinking and not an extended being, and since on the other hand I have a distinct idea of a body in so far as it is only an extended being which does not think, it is certain that this "I" (that is to say, my soul, by virtue of which I am what I am) is entirely (and truly) distinct from my body and that it can (be or) exist without it. (emphasis added)
>
> (Meditations, p. 74)

Virtually the same passage appears in the Discourse on Method (p. 54) leaving no doubt that for Descartes the "I" is confined exclusively and solely to the thinking substance, mind, and that mind and body are separate and distinct entities. If mind can exist without the body then it is only a contingent fact that I have the body I do have now.

One of the central doctrines of the Meditations, if not the most important then certainly very close to it, is the real distinction between mind and body. This is shown by the full title of the work: Meditations on First Philosophy, in which the Existence of God and the Real Distinction between Mind and Body are Demonstrated.

Such a radical division and separation of mind and body creates problems with regard to any account for ordinary, every day bodily occurrences. Descartes feels compelled to modify his stance. "Nature also teaches me by these feelings of pain, hunger, thirst, and so on that I am not only residing in my body as a pilot in his ship, but furthermore, that I am intimately connected with it, and that (the mixture is) so blended, as it were, that (something like) a single whole is produced" (Meditations, p. 76). Where Descartes had insisted that mind and body were separate and distinct entities he now claims that they are intimately connected. At first he maintains that he is a being whose sole essence is thinking and that the substance which thinks is ontologically different and exclusive from bodily substance but now it appears that he is modifying his dualistic thesis when he argues that sensations and images can only arise in the mind through its union with a material body. While it is reasonable to believe that sensations do arise in the body, serious, insurmountable problems still remain regarding how two such disparate substances, mind and body, which are irreducible to each other, can become intimately connected.

Even on the assumption that answers to the problem just cited can be provided--and to date this has not happened--from the epistemological perspective of physical education and education nothing changes for according to Descartes the pure intellect of the mind gains knowledge by reflection upon itself in the case of intellectual matters and needs neither bodily sensations nor the function of the imagination to add to its store of knowledge. Descartes' epistemological position is that there is no conceptual connection between any "thought" or mental occurrence and any physical occurrence. Even if there was some conceptual connection no knowledge would be produced since bodily sensations can always be doubted and imagination can surely conjure up inexistent or false images. Only the intellect, reflecting upon itself, in its close association with God, can produce knowledge. For Descartes, it is the business of the mind alone, and not of the mind and body, to decide the truth of all matters where there may be some doubt.

Three specific features of the Cartesian view are identified by Langford (p. 66): (1) mind and body are exclusive kinds of things; (2) being a mind or body is a yes/no kind of thing; and (3) the mind, as characterized by privacy, is thought of in highly individualistic, non-social terms. These features provide the specific context for the analysis which will show that holding a Cartesian view of man is inimical to both the notion of physical education as well as to the notion of education.

III

Physical education, as education of the physical, with its emphasis on the training and development of the body, including the acquisition of motor skills, gives the impression that no thinking is needed, that there is no "mental" involvement. The very claim that there can be such a thing as education of the physical is open to the charge of being unintelligible when discussed within a Cartesian conception of man. Under that thesis physical is contrasted with mental to show the difference between the two and it is only the mental, the thinking component, which can be educated. Physical substances, by their very nature, are not the sorts of things which can think and so it follows that a Cartesian body, a physical substance, cannot be educated. True, the muscles of the body can be strengthened to delay the onset of fatigue and enhance health, and they also can be trained to perform a myriad of tasks, such as the most complex motor skills, more efficiently, but that training cannot be construed as education since truths are not transmitted. Minds, thinking things, can be educated but non-thinking things, such as bodies, cannot.

What may, at first sight appear to be physical education turns out to be either something which cannot be called education, since that which is to be educated is an uneducable physical substance, or if one insists on calling it education, it would have to be under a special definition of that term, one devoid of epistemological connotation. Our ordinary understanding of the term, "education" includes the transmission of knowledge but that understanding is inappropriate when applied to a Cartesian

body for the body is a substance which cannot incorporate into itself such a thing as knowledge. The conception of physical education as education of the physical is therefore completely incompatible with a Cartesian conception of man since the very idea of knowledge is ruled out.

Replacing the conception of physical education as education of the physical with its successor, physical education as education through the physical appears to eliminate the problems encountered by the former conception. Implicit in the latter view is the belief that physical education contributes to the social, psychological, physical, and intellectual development of the individual. In effect, it is the mind that is educated through the education of the body during vigorous physical activity. Claiming that it is the mind that is being educated appears to be perfectly compatible with Descartes' theory but even this claim encounters a number of very serious difficulties.

On the Cartesian view, what is essential to the mind is its ability to reflect on its own activity in thinking and so it needs no stimulation or input from external sources. It can therefore be a mind and know that and what it is--and so, in essential respects be complete as a mind--without knowing anything at all about the physical world or other minds. Knowledge is developed deductively from the first axioms or principles which were discovered without resorting to sensory experiences or information garnered from the external world. True knowledge comes about as a result of developing further theorems from the initial axioms and for that external events in the form of instruction, be it in reference to "physical

activity" or "mental activity" is both superfluous and redundant.

Another consequence arises from the notion of the Cartesian mind that is essentially complete as a mind. Acquiring a new or improved body, improving various motor skills, gaining knowledge of the external world, or entering into social relationships makes no essential difference to the mind. These experiences may affect the modes of consciousness or perhaps even the content of the mind but, logically, they cannot alter the essence of the mind which is essentially complete at all times. One cannot even state that the mind was complete at birth since it could well have existed as a complete mind well before birth. A Cartesian mind can exist in the bodies of various and sundry other people, past and present. Wherever and whenever a Cartesian mind exists it is essentially complete as a mind. Now our concept of education always implies changes of a fundamental or non-trivial kind. Education changes the kind of person one is, making him, in one sense, a different person; he is simply not the very same person of whom certain things happen to be true but the Cartesian view of mind is not amenable to change of this kind. It is not, therefore, possible to educate the person--here person is used in the strict Cartesian sense as referring only to the mind--because the person in being a mind is a complete whole from the start.

A further difficulty confounds the idea of educating a Cartesian mind which stems from the view that the concept of education is above all a social process involving teachers and students. No matter how narrowly or how broadly education is defined one basic, essential element must be

present--at the very least there must be "a meeting of minds". According to Descartes' description and definition of mind mental happenings, which would be the process and products of education, occur in insulated fields known as minds. Ryle (p. 13) notes the consequences:

> there is, apart maybe from telepathy, no direct causal connection between what happens in one mind and what happens in another. Only through the medium of the public physical world can the mind of one person make a difference to the mind of another. The mind is its own place and in his inner life each of us lives the life of a ghostly Robinson Crusoe. People can see, hear and jolt one another's bodies, but they are irremediably blind and deaf to the workings of one another's mind and inoperative upon them.

By describing mind as an immaterial, unextended substance Descartes created a situation where there is no way to identify mind. Intersubjectivity becomes impossible. We have no way of knowing that other minds exist and so it follows that no "meeting of minds" is possible. Without this meeting we must conclude that even the Cartesian mind cannot be educated.

From an epistemological perspective one additional issue needs to be raised regarding the Cartesian mind and its source of knowledge. Epistemological analysis is not only concerned with analyzing the nature and validity of our present knowledge but it is also concerned with examining our sources of knowledge. Frequently the analysis of our

present knowledge cannot be undertaken without first exploring the source. A Cartesian mind is complete in itself; it learns all it needs to know about itself from itself, or from God and confirms its knowledge either on the basis of rational logic or on an appeal to the infallibility and "honesty" of God. While such knowledge may be valid its source is forever hidden behind an inpenetrable wall. By placing the source of our knowledge beyond the reach of ordinary mortal epistemological analysis Descartes compels us to accept on the basis of pure faith. Acceptance on the basis of pure faith either precludes the need for epistemological analysis or else it limits the scope so severely that very few philosophers would be attracted to such an enterprise.

IV

Our analysis has shown that a Cartesian person cannot be educated physically nor can such a person be educated mentally. A Cartesian mind, in being complete as a mind right from the start, does not require external stimuli for its intellectual development nor can it trust bodily sensations as a source of knowledge since there always exists the possibility that our senses will deceive us. Knowledge cannot be gained through or from physical activity. Acceptance of a Cartesian conception of man renders the term, physical education, under both the education of and education through the physical interpretations, meaningless. Furthermore, acceptance of a Cartesian conception of man also precludes the possibility of elaborating an epistemology of human action, where such an epistemology would explicate the knowledge that an agent has in

performing the action. Such knowledge, the knowledge which an agent has in the doing of the action cannot be transformed into propositional statements. We can point to the knowledge and tell many things about it but the exact, specific knowledge is only demonstrated in the action itself. This form of knowledge is of direct interest to physical education but to date it has not commanded the attention of physical education philosophers who, almost totally, have neglected epistemology.

Neither has much effort been devoted in the physical education literature to the mind-body problem and the theory of persons. One interpretation of the Cartesian thesis sees a person as a composite of two distinct entities, a mind and a body. By positing the existence of these two distinct and different sorts of entities Descartes provides the ingredients for the concept of a person but this does not, by itself, provide an account of the concept of a person as such. The ingredients are there but the problem of the relationships between such disparate components still has not been solved. If we keep the components separate we could then go on to say that a person consists of two parts, a mind and a body, and so education of the whole person would simply require educating both parts. Success in this educational venture would result in, as the familiar saying has it, a sound mind in a healthy body. But we have just seen that the Cartesian body is not the sort of thing which can be educated and, for various other reasons, neither can the Cartesian mind be educated. Since both components of the Cartesian conception of man do not appear to be educable the concept of education of the whole man is

inapplicable to a Cartesian conception of man.

For physical education to merit consideration as an educational endeavor an alternate model of man is required. Within the theory of persons there are four possible options: (1) a combination of two separate entities, mind and body, such as described by Descartes; (2) mind only, such as described by Berkley; (3) body only, such as described by materialist and physicalist theories; and (4) an integrated, unified entity. We have seen that the first option is not viable for physical education (nor for education) from both an epistemological and educational perspective. With reference to the second option, it is a philosophical position no longer seriously considered but if it were a viable option the notion of physical education would obviously be unintelligible. While the third option appears to be very attractive for physical education it has great difficulties in accounting for the "self" and without a "self" we have no way of distinguishing mere bodily movement from action. Of greater consequence is the fact that without a self there can be no learning, hence no knowing and so, once again, the notion of education is destroyed. We are left with one, final possibility, man as an integrated, unified entity, a model that is consonant with the notion that education is of the whole man. Enunciating and elaborating a theory of an integrated, unified person is a challenge that should rank as a very high priority with philosophers of physical education.

Under an integrated, unified model of man physical education is not education <u>of</u> the physical nor is it education (of the mind) <u>through</u> the

physical but it is education of the person. Whenever such a person engages in action both decisions and judgments are involved. Decisions made and judgments rendered presupposes concepts hence a person's actions are always conceptual in nature, or thought-impregnated. This then is the knowledge that is of concern to physical education, a wide-ranging, infinite variety of non-propositional concepts, that is, the knowledge that is in the action. Since epistemologists have devoted almost all of their efforts to describing and analyzing propositional knowledge it now becomes the task of philosophers of physical education to render an account of physical action knowledge, the knowledge that is pertinent to their domain.

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